

REMARKS

The Office Action mailed on June 1, 2007 has been received and reviewed. Claims 1-26 remain in the case. Claims 1-7, 9-12, 15-17, 19 and 20 were rejected under 35 U.S.C. 102(b) as being anticipated by Testardi (6,249,882), hereinafter simply Testardi. Claims 8, 13, 18, and 25 were rejected under 35 USC 103(a) as being unpatentable over Testardi in view of Rosenberg (Jonathan B. Rosenberg, "How debuggers work").

In light of the rejections, a review of the present invention may help clarify the novelty of the Applicants' claims over the cited prior art. As shown in Figures 2-4 an apparatus for debugging source code enables a user to invoke selected initialization routines corresponding to a particular function within a source code debugger in order to initialize a target environment to a state suitable for executing the function and observing its performance with a debugger. The apparatus may include a function selector configured to generate an execution request and a task dispatcher configured to dispatch the initialization routines in response to the execution request. In certain embodiments, the function selector generates the execution request in response to selection of the target function by a user.

Much of the utility of the present invention arises from the relationship between the target function and the initialization routines. The correspondence between the initialization routines and the target functions may be dynamically adjusted to according to user preference and need (*see paragraph 43*). More than one set of initialization routines may be associated with a target function. The initialization routines may include function independent routines (suitable for use with any target function) as well function dependent routines (suitable for use with specific target functions). The initialization routines may be developed using the same programming languages and tools as the application source code used to generate the target functions that are being tested. Furthermore, compiled initialization routines and compiled target functions may co-exist as compiled binary files within the system under test and selectively paired and executed (*see Figures 2 and 3 and the associated description*). Effectively, the present invention enables a developer or tester to create an arsenal of initialization routines and then selectively apply the initializations routines to a particular function in order to achieve a desired effect.

In contrast to the present invention, the cited prior art extracts test directives and parameters that are embedded as comments within the source code files of an application (*see the Abstract of Testardi as well as Figure 1 and the associated description in col. 5 line 48 to col. 6 line 44*). The test directives are interpreted by an interpreter 110 in order to initialize the environment and construct a command script that is executed by the debugger 112 (*see also col. 10 lines 4-52*).

One particular disadvantage of Testardi as understood by the Applicants is that the relationship between the test directives and the code being tested is fixed within the source code and therefore cannot be selectively coupled. Applicants therefore assert that Testardi did not disclose the claimed limitation of an “initialization routine selectively coupled to a target function within a target application.” Applicants note that the “selectively coupled” limitation introduced by the Applicants in the previous response was not addressed by the Examiner in the most recent office action. Applicants therefore assert that the issuance of a final rejection was improper and request reconsideration of Applicants claims.

Applicants also assert that processes of Testardi cited by the examiner namely ‘the setup of environmental test parameters of a test sequence,’ initializing ‘global variables,’ ‘executing a program under a test,’ or ‘returning test succession or failure to a user,’ is not the same as an “initialization routine selectively coupled to a target function within a target application.” Furthermore, Applicants assert that the teachings of Testardi are insufficient to enable one of ordinary skill in the art to make and use the claimed invention of the Applicants and therefore insufficient to properly anticipate the present invention. In particular, Applicants assert that one of skill in the art would not envision the claimed invention of the Applicants from the disclosure of Testardi. Therefore Applicants assert that each of the independent claims which include the “selectively coupled” limitation are in condition for allowance as well as the claims which depend therefrom.

Claims 1, 9, 15, 19, and 21 all include the limitation “selectively coupled.” Because the prior art does not disclose this limitation, the rejections under Section 102 and 103 are improper and the rejection should be withdrawn. Because the limitation was not addressed in the office action, the final status of the rejection should be withdrawn.

CONCLUSION

The present invention enables the use of an arsenal of initialization routines that can be selectively coupled to a target function. The prior art does not provide such flexibility. Applicants therefore assert that claims 1-26 represent novel and non-obvious improvements and respectfully request prompt allowance thereof.

Respectfully submitted,

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